

# Recovery Plan Action Status

Plan Name: Final Recovery Plan for Phlox hirsuta (Yreka Phlox)

Plan Status: Final

Plan Date: 21-Sep-06

Lead Agency: USFWS

Lead Office: Yreka Fish And Wildlife Office

(530)

842-3763 )

| Species                     | Action Priority # | Action # | Action Description  | Action Status   | Est. Initiation Date | Est. Completion Date | Responsible Parties   | Work Type                    | Labor Type  | Action Comments   |
|-----------------------------|-------------------|----------|---|-----------------|----------------------|----------------------|---|------------------------------|---|---|
| Yreka phlox (Phlox hirsuta) | 1                 | 1.1      | Protect and secure China Hill occurrence  | Ongoing Current | FY 1995 - FY 1999    |                      | California Department of Fish and Game, Private landowners, California Wildlife Conservation Board, City of Yreka | Acquisition: Fee Title       | Internal Administrative   | On July 26, 2006, the California Wildlife Conservation Board conveyed an additional 8 ha (24 ac) to the City of Yreka for Phlox hirsuta conservation on China Hill.   |
| Yreka phlox (Phlox hirsuta) | 1                 | 1.2      | Protect and secure Soap Creek Ridge, Cracker Gulch, and Jackson Street occurrences. Alternatively, protect the Soap Creek Ridge occurrence and substitutes for Cracker Gulch and Jackson Street occurrences | Ongoing Current | FY 2010              |                      | California Department of Transportation, U.S. Forest Service, Private landowners                                  | Acquisition: General         | Internal Administrative   |   |
| Yreka phlox (Phlox hirsuta) | 2                 | 2.1      | Prepare a monitoring plan that will identify threats and adverse impacts to Phlox hirsuta occurrences   | Ongoing Current | FY 2008              |                      | California Department of Fish and Game, U.S. Forest Service, Private landowners, Universities or Colleges         | Research: Population Surveys | Internal Administrative, Internal Field Assistance, Internal Technical Assistance | A pilot study for a long-term population and threats monitoring program was initiated in the 2008 field season and continued in the 2009 field season. A fourth year of population and threats monitoring was continued in 2011 field season. |
| Yreka phlox (Phlox hirsuta) | 2                 | 2.2      | Implement threat monitoring   | Ongoing Current | FY 2010              |                      | U.S. Forest Service, Private landowners, City of Yreka  | Research: Population Surveys | Contract  |   |

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| Yreka phlox (Phlox hirsuta) | 3                 | 2.3      | Prepare a monitoring report at the end of 10 years that summarizes the findings of the threat-monitoring program | Not Started         |                      |                      | California Department of Transportation, U.S. Fish and Wildlife Service, California Department of Fish and Game, U.S. Forest Service, Private landowners, City of Yreka | Work type not yet selected | Labor type not yet selected   |   |
| Yreka phlox (Phlox hirsuta) | 2                 | 2.4      | Develop and implement a management plan for each protected site  | Not Started         |                      |                      | California Department of Transportation, California Department of Fish and Game, U.S. Forest Service, Private landowners, Siskiyou County, California, City of Yreka    | Management: General        | Contract  | Although management plans for protected sites have not yet been developed, a Partners for Fish and Wildlife grant with the Siskiyou County Department of Agriculture has resulted in exotic weed treatment in areas within and surrounding 2 of 5 Phlox hirsuta occurrences in 2008 and 2009 and 4 of 5 occurrences in 2010 and 2011. |
| Yreka phlox (Phlox hirsuta) | 1                 | 3.1      | Write and implement a plan for seed storage  | Ongoing Not Current | FY 2008              |                      | California Department of Fish and Game, Center for Plant Conservation, Universities or Colleges   | Management: Propagation    | Internal Administrative, Internal Field Assistance, Internal Technical Assistance | Through a Section 6 grant and volunteer assistance, CDFG and Service staff started collecting seeds on China Hill in June 2008 and continued this effort in June 2009. Seeds have been accessioned at Rancho Santa Ana Botanic Garden.  |

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| Yreka phlox (Phlox hirsuta) | 1                 | 3.2      | Write and implement a plan to develop propagation techniques. If future evidence indicates that collection for horticultural purposes occurs frequently and is not controlled by outreach about Phlox hirsuta, then consider developing guidelines which would allow legal nursery acquisition and sale of P. hirsuta plants without threatening native populations | Not Started         |                      |                      | U.S. Fish and Wildlife Service, California Department of Fish and Game, U.S. Forest Service, Siskiyou County, California, Nurseries                                      | Management: Propagation                            | Contract  |  |
| Yreka phlox (Phlox hirsuta) | 3                 | 3.3      | Prepare a reintroduction plan that 1) specifies the conditions warranting and 2) guides the potential reintroduction of "off-site" Phlox hirsuta plant materials (seeds or plants) into areas currently supporting phlox or for establishing new wild-land occurrences  | Not Started         |                      |                      | U.S. Fish and Wildlife Service, California Department of Fish and Game, U.S. Forest Service, Private landowners, Center for Plant Conservation, Universities or Colleges | Management: Reintroduction                         | Contract  |  |
| Yreka phlox (Phlox hirsuta) | 3                 | 4.1      | Create a map that shows where surveys have been completed   | Complete            | FY 2006              | FY 2007              | U.S. Fish and Wildlife Service, California Department of Fish and Game   | Management: Planning                               | Internal Administrative   | This information is housed at the Yreka Fish and Wildlife Office and the 2007 completion of the map was a coordinated effort between the FWS and CDFG. |
| Yreka phlox (Phlox hirsuta) | 3                 | 4.2      | Create incentives for private- and public-land surveys  | Ongoing Not Current | FY 2000 - FY 2004    |                      | U.S. Fish and Wildlife Service, California Department of Fish and Game, Siskiyou County, California, City of Yreka   | Management: Planning, Research: Population Surveys | Contract, Graduate Student, Internal Administrative, Species Expert | Approximately 443 hectares (1093 acres) of potential habitat were surveyed for Phlox hirsuta in the 2006 field season.                                 |

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| Yreka phlox (Phlox hirsuta) | 3                 | 4.3      | Protect and secure at least two additional Phlox hirsuta occurrences (in addition to the China Hill, Soap Creek Ridge, Jackson Street, and Cracker Gulch occurrences) | Not Started        |                      |                      | U.S. Fish and Wildlife Service, U.S. Forest Service, Private landowners, City of Yreka | Acquisition: Easement, Acquisition: Exchange, Acquisition: Fee Title, Acquisition: Lease, Acquisition: Management Agreement, Acquisition: Withdrawal | Internal Administrative, Internal Field Assistance, Internal Technical Assistance |   |
| Yreka phlox (Phlox hirsuta) | 2                 | 5.1      | Determine whether Phlox hirsuta populations are stable, increasing, or declining over time  | Ongoing Current    | FY 2008              |                      | California Department of Fish and Game, Universities or Colleges                       | Research: Population Surveys   | Internal Administrative, Internal Field Assistance, Internal Technical Assistance | A pilot study for a long-term population and threats monitoring program was initiated at 4 occurrences in the 2008 field season and continued in the 2009 field season. A fourth year of the long-term population and threats monitoring program was continued in the 2011 field season.  |
| Yreka phlox (Phlox hirsuta) | 2                 | 5.2      | Determine breeding system, degree of seed production and seed viability, seed dormancy characteristics, and germination requirements                                  | Partially Complete | FY 2000 - FY 2004    | FY 2006              | California Department of Fish and Game, Universities or Colleges                       | Research: Demographic Studies  | Contract, Graduate Student  | In May 2008, the Service received the final report for a Section 6 project: Ferguson, C.S., J. Filipski, and K. Donham (2006). The mating system of the Yreka phlox (Phlox hirsuta E.E. Nelson). Southern Oregon University, Ashland, Oregon. In 2010, a new research project on the effect of pollination distance on Yreka phlox fruit set was initiated. |

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| Yreka phlox (Phlox hirsuta) | 2                 | 5.3      | Determine pollinators and pollination success  | Partially Complete | FY 2000 - FY 2004    | FY 2006              | Universities or Colleges  | Research: Habitat Requirements   | Contract, Graduate Student   | In May 2008, the Service received the final report for a section 6 project: Ferguson, C.S., J. Filipksi, and K. Donham (2006). The mating system of the Yreka phlox (Phlox hirsuta E.E. Nelson). Southern Oregon University, Ashland, Oregon. In 2010, a new research project on the effect of pollination distance on Yreka phlox fruit set was initiated. |
| Yreka phlox (Phlox hirsuta) | 2                 | 5.4      | Determine whether specific disturbances (e.g., fire or soil disturbance) or other management actions are needed for successful or enhanced recruitment | Not Started        |                      |                      | Universities or Colleges  | Research: Habitat Requirements   | Contract   |   |
| Yreka phlox (Phlox hirsuta) | 3                 | 6.1      | Participate in the Siskiyou County Wildflower Show   | Ongoing Current    | Prior to FY 1995     |                      | California Native Plant Society, California Department of Fish and Game, U.S. Forest Service, City of Yreka | Other: Information and Education | Internal Administrative, Internal Field Assistance, Internal Technical Assistance, Species Expert, Volunteer |   |
| Yreka phlox (Phlox hirsuta) | 3                 | 6.2      | Develop China Hill interpretive display and encourage public participation   | Ongoing Current    | FY 2009              |                      | California Native Plant Society, City of Yreka  | Other: Information and Education | Internal Administrative, Internal Field Assistance, Internal Technical Assistance, Volunteer                 | On September 8, 2009, the City of Yreka adopted the Yreka phlox as its official City Flower. On May 1, 2010 and April 30, 2011 Service staff and a member of the Siskiyou Arboretum, led an interpretive walk on China Hill to discuss Yreka phlox recovery. On May 21, 2011, volunteers pulled noxious weeds on China Hill.                                |

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| Yreka phlox (Phlox hirsuta) | 3                 | 6.3      | Encourage public participation in long-term monitoring | Not Started   |                      |                      | California Native Plant Society, U.S. Fish and Wildlife Service, California Department of Fish and Game, U.S. Forest Service, City of Yreka | Management: General, Other: Information and Education | Internal Administrative, Internal Field Assistance, Internal Technical Assistance, Volunteer |                 |